

# What to look for when buying Sunglasses

## By Debra Watts of Ringlands Optics

Sunglasses are not just a fashion accessory but a must for protecting the eyes from harmful solar radiation.

### What is harmful Radiation?

- UVC rays are the highest-energy UV rays and potentially could be the most harmful to your eyes and skin. Fortunately, the atmosphere's ozone layer blocks virtually all UVC rays.
- UVB rays have slightly longer wavelengths (280-315 nm) and lower energy than UVC rays. These rays are filtered partially by the ozone layer, but some still reach the earth's surface. In higher doses, UVB rays cause sunburn that increases the risk of skin cancer. UVB rays also cause skin discolorations, wrinkles and other signs of premature aging of the skin.
- UVA rays are closer to visible light rays and can pass through the cornea at the front of the eye and reach the lens and retina inside. Overexposure to UVA radiation has been linked to the development of certain types of cataracts, and research suggests UVA rays may play a role in development of macular degeneration.

### What to consider when buying Sunglasses

- Expensive sometimes means better, but not necessarily. What really counts is the degree to which the lenses filter out harmful UV rays. Look for the CE mark, which proves they conform to the European Community Standard. They should also satisfy British Standard BSEN1836, meaning they will provide high levels of protection against damaging ultraviolet light.
- Do not confuse the shade of the lenses with their ability to filter UV rays. Dark sunglasses may still allow UV rays to enter the eye. Sunglasses are marked with a filter category from 0-4, where 4 is the darkest lens.
- UV protection has nothing to do with lens colour. It has everything to do with stopping radiation that can damage your eyes. The best lenses will block 100% of UV-A, UV-B and harmful blue light.
- Polarising lenses will reduce reflective glare from water and land surfaces, making them particularly good at improving vision in bright or hazy driving conditions or for protection in snowy conditions.
- Photocromic lenses go darker in the sunlight and are good UV absorbers.
- High-contrast lenses work like a graphic equaliser on a stereo: they balance pitches of light, helping the wearer to see things more naturally.
- Wraparound styles further protect the eyes by helping to keep out peripheral glare.

When buying sunglasses, get the advice of a professional, who can advise you on the best protection for the health of your eyes and your lifestyle.